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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,147	08/02/2001	Harold L. Mantius	00414-063001	6421

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EXAMINER	
PRATT, HELEN F	

ART UNIT	PAPER NUMBER
1761	6

DATE MAILED: 10/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/921,147	MANTIUS ET AL.	
	Examiner	Art Unit	
	Helen F. Pratt	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-40 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-40 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 9 and 21 are indefinite in the use of the phrase "combining the acids-reduced juice fraction with a second portion of the fruit juice to create a acids-reduced fruit juice". It is not clear whether the second portion of the fruit juice is a different juice than the previously separated juice.

MISCELLANEOUS

The title should also reflect the product.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Laid-Open Patent application No. 18971 found in Puri (4,439,458), col. 3, lines 16-30) or Puri taken alone.

According to Puri, Japanese Laid Open Patent Application No. 18971, discloses a method as in claims 1 and 7 and product thereof of treating citrus juice to remove the

insoluble solids to 0.5%, then treating juice with an anion exchange resin, and mixing the thus acid removed fruit juice with a nonacid removed fruit juice having insoluble solids content of more than 0.5% in an adequate amount (col. 3, lines 16-30).

Also, Puri '458 discloses a product and method of making the product as in claims 1 and 7. Puri discloses that it is known to deacidify fruit juice before or after debittering the juice (col. 3, lines 30-40). Pulp free citrus juice is debittered, and then can be combined with an untreated juice and packaged as a liquid, or dry powder (col. 5, lines 65-69 and col. 6, lines 1-24).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 –8, 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese laid open patent application No. 18971 found in Puri '458 and Puri '458 or Dechow et al.

The limitations as to claim 1 have been disclosed above as to the Japanese application 18971 found in Puri and Puri taken alone. Dechow et al. disclose a method of treating fruit or vegetable juice by passing it through a bed to remove acids. The treated product can be blended with untreated juice (abstract). Claim 1 differs from the reference in providing a juice which is free of insoluble fruit solids. However, no weight is given to this limitation at this time, as no specific method of removing the acids is

claimed, and in the method of Dechow et al. solids can remain in the juice to be treated. At any rate, the reference shows the obviousness of combining a deacidified juice with untreated juice.

Claim 2 requires that the acid-enriched juice fraction (AEJF) is combined with a portion of the fruit juice. As it is known to remove acid from fruit juice and to combine it with another fruit juice, it would have been obvious to use the acid enriched juice with the opposite, i. e. juices needing an acid taste, just as it is known to increase the acidity of for instance apple pie, by adding lemon juice. Puri also discloses that it is known to blend treated juices with untreated juices to attain a controlled, constant level of bitterness in a final product (col. 6, lines 15-22). The juices as above would have had some acid removed.. Therefore, it would have been obvious to enrich juices with an acid fraction because it is known in general to control bitterness and acidity of juices and food products.

Claim 3 requires concentrating the ARFJ and claim 4 requires concentrating AEnriched FJ. Puri discloses concentrating the fruit juice before processing (col. 10, and 19-24, and lines 66-70). Even though the juice is not concentrated after removing the acids portion or enriched with the acid portion, no patentable distinction is seen at this time in concentrating after the acid has been removed or concentrating after the juice has been acid enriched, absent any specific limitations as to how the acidic compounds are removed, especially in the product as in claims 6 and 7. As it is known to concentrate the ARFJ, it would have been also obvious to concentrate the AEFJ for the same function of reducing the amount of juice being processed.

Claim 5 requires that the juice is cranberry juice. However, Dechow et al. is to treating fruits and vegetables and Puri to citrus juices. Nothing is seen that the juice of cranberries would have required a different treatment as other juices, as it contains acids, and sugars and pulp, and water and various processes for removing acids from juice streams are known. Therefore, it would have been obvious to treat cranberry juice to remove acids in either of the processes of Puri or Dechow et al. because they show how to remove the acids.

Claims 6 and 7 are also a product by process claims. The fact that the procedures of the reference are different than that of applicant is not a sufficient reason for allowing the product-by-process claims since the patentability of such claims is based upon the product formed and not the method by which it was produced. See In re Thorpe 227 USPQ 964. The burden is upon applicant to submit objective evidence to support their position as to the product-by-process claims. See Ex parte Jungfer 18 USPQ 2D 1796. Therefore, it would have been obvious to make the product as above.

Claims 21-28 are to a vegetable juice. No patentable distinction is seen between vegetable juices and fruits juices at this time, as they are both mostly water, with pulp, acids, and small amount of other soluble solids, and fiber. Therefore, it would have been obvious to use the claimed method on vegetable juices as shown by the above patents.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over ~~Perry et al.~~ Puri or Dechow et al. as applied to claims 1-7, 21-28 above, and further in view of Perry et al..

Claim 8 further requires that the acids are removed with nanofiltration. Perry et al. disclose a process of removing acids from aqueous feed streams (abstract). The process uses a non-electrodialysis membrane which has a pore size of 0.1 to 1.0 nanometers (col. 13, lines 5-35). Therefore, it would have been obvious to remove acids using nanofiltration in the process of Puri or Dechow et al.

Claims 9-20, 29-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over the above references as applied to claims 1-8, 21-28 above, and further in view of Gresch (5,496,577).

Claims 9 -20 are to an acid enriched fruit juice and claims 29-40 are to an acid enriched vegetable juice. Gresch discloses a process for making a low sugar beverage, in which the juice is divided into two streams, one which is low acid/sugar ratio and the other a higher sugar content and an elevated acid sugar ratio and a lower sugar concentration. The second stream with the high acid content is then mixed with the first stream (abstract). Claim 9 differs from the reference in the combining of the juice streams, in that it is not known whether the acid enriched stream is combined with a completely different juice that that already divided, or is combined with the low acid stream as in Gresch. The claim is taken to read that the high acid stream is combined with the low acid stream as taught by Gresch. Therefore, it would have been obvious to combine the juice streams as disclosed by Gresch.

The further limitations have been discussed above and are obvious for those reasons except for claims 9 and 36. Gresch discloses nanofiltration as a preliminary step which produces the high acid, low sugar stream (col. 4, lines 46-68). Therefore, it

would have been obvious to use nanofiltration in the processes of the above references to enrich a juice stream.

Also, claims 19 and 20 are to drying the acid enriched juice or reduced acid juice. Puri discloses that the treated juice can be processed into a dry powder (col. 6, lines 19-22). Therefore, it would have been obvious to dry the juices of the above references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 703-308-1978. The examiner can normally be reached on Monday, Wednesday and Friday from 9:30 to 6:00 and Tues and Thurs. from 4:30 to 10 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on (703) 3959. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1193.

Hp 10-4-02

HF Pratt

HELEN PRATT
PRIMARY EXAMINER